

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application Number : 09/546,573 Confirmation No.: 3408
Applicant : Mads HOLLEN-ANDERSEN et al.
Filed : April 10, 2000
Title : TISSUE INHIBITOR OF MATRIX METALLOPROTEINASES
TYPE-1 (TIMP-1) AS A CANCER MARKER
TC/Art Unit : 1642
Examiner: Stephen L. Rawlings, Ph. D.

Docket No. : 59866.000002
Customer No. : 21967

MAIL STOP AMENDMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Sir:

In accordance with 37 C.F.R. §§ 1.97 and 1.98, and in compliance with the duty of disclosure set forth in 37 C.F.R. § 1.56, applicants submit attached Form PTO-SB/08A (modified) for consideration and request the references cited therein be made of record by the U.S. Patent and Trademark Office in the above-captioned application.

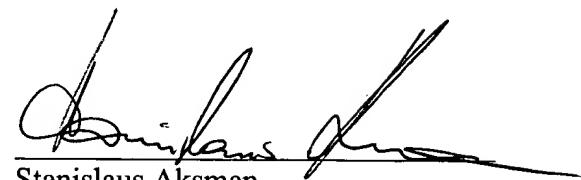
Applicants respectfully point out that the submission of the listed references in this Information Disclosure Statement is not an admission that they are prior art or that they are material to patentability of any claims of the application. Also, the submission of this Information Disclosure Statement is not an indication that a search has been made by Applicants.

For the convenience of the Examiner in considering the cited references, a copy of each of the cited references is enclosed with this communication. In considering the cited references, it may be noted by the Examiner that certain of the references may contain markings, underlinings, and/or other notations. These markings, underlinings, and/or other notations are not to be construed as drawing the Examiner's attention either to selected parts or away from other parts of the cited references. Any such markings were either present on the copies of the cited references obtained by the associated individuals, or were made thereon during the study of the

Respectfully submitted,

HUNTON & WILLIAMS LLP

By:



Stanislaus Aksman
Registration No. 28,562

Dated: November 2, 2004

Hunton & Williams LLP
Intellectual Property Department
1900 K Street, N.W.
Suite 1200
Washington, DC 20006
(202) 955-1500 (telephone)
(202) 778-2201 (facsimile)
SA/sdw

references by the associated individuals. Applicants respectfully point out that the submission of the listed references in this Supplemental Information Disclosure Statement is not an admission that they are prior art or that they are material to patentability of any claims of the application. Also, the submission of this Supplemental Information Disclosure Statement is not an indication that a search has been made by Applicants.

Consideration of the foregoing plus the prompt return of a copy of the enclosed Form SB/08A with the Examiner's initials in the left column in accordance with MPEP 609 are respectfully requested.

In accordance with 37 C.F.R. § 1.97(c), this Supplemental Information Disclosure Statement is being filed (i) before the mailing date of a final Office Action for the above-identified patent application; (ii) before the mailing date of a Notice of Allowance for the above-identified patent application; or (iii) before the mailing date of an Office Action that otherwise closes prosecution in the above-identified patent application. Accordingly, this Supplemental Information Disclosure Statement is accompanied by a statement under 37 C.F.R. § 1.97(e).

The undersigned hereby states under 37 C.F.R. § 1.97(e)(2) that no item of information contained in this Supplemental Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, after making reasonable inquiry, no item of information contained in this Supplemental Information Disclosure Statement was known to any individual associated with the filing and prosecution of the above-identified patent application more than three months prior to the filing of this Supplemental Information Disclosure Statement.

However, in the event any fee is deemed necessary, the Commissioner is authorized to charge the undersigned's Deposit Account No. 50-0206.

***EXAMINER:** Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FILING ACKNOWLEDGMENT
US PATENT AND TRADEMARK OFFICE

Mailing Date: 06/26/01 Attorney: KLB/jrc
Date Due: _____ Appln 09/546,573
File No.: 019829000310
Inventor(s): HOLTEN-ANDERSEN

Title: TISSUE INHIBITOR OF MATRIX METALLOPROTEINASES TYPE-1
(TIMP-1) AS A CANCER MARKER

Enclosures: Transmittal Form (Form PTO/SB/21); Supplemental Information Disclosure Statement, Form PTO-1449 with copy of cited references; International Search Report and Certified Copy of Priority Document; Certificate of First Class Mailing and Return Mail Room Postcard (this one).

Please stamp the date of receipt of the enclosed documents and return this card to addressee.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to:

Assistant Commissioner for Patents
Washington, D.C. 20231

On June 26, 2001

TOWNSEND and TOWNSEND and CREW LLP

By: J.W.R. Clarke
J.W.R. Clarke

PATENT

Attorney Docket No.: 019829000310
Client Reference No.: 20236US01

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Holten-Andersen, Mads et al

Application No.: 09/546,573

Filed: April 10, 2000

For: TISSUE INHIBITOR OF MATRIX METALLOPROTEINASES TYPE-1 (TIMP-1) AS A CANCER MARKER

Examiner: Rawlings, S.

Art Unit: 1642

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR §1.97 and §1.98

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

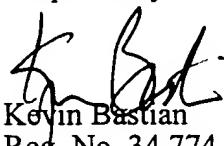
The references cited on attached form PTO-1449 are being called to the attention of the Examiner. Copies of the references are enclosed. Also enclosed is a copy of the Search/Examination report corresponding to the PCT application. It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and

no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

Applicant believes that no fee is required for submission of this statement, since it is being submitted prior to the first Office Action. However, if a fee is required, the Commissioner is authorized to deduct such fee from the undersigned's Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,



Kevin Bastian
Reg. No. 34,774

TOWNSEND and TOWNSEND and CREW LLP
Two Embarcadero Center, 8th Floor
San Francisco, California 94111-3834
Tel: 415-576-0200
Fax: 415-576-0300
KLB:jrc

SF 1240697 v1

FORM PTO-1449 (Modified) LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)		Attorney Docket No.: 019829000310	Application No.: 09/546,573			
		Applicant: Holten-Andersen, Mads et al.				
		Filing Date: April 10, 2000		Group: 1642		
Reference Designation		U.S. PATENT DOCUMENTS			Page 1	
Examiner Initial	Document No.	Date	Name	Class	Sub-class	Filing Date (If Appropriate)
AA						
AB						
AC						
AD						
AE						
AF						
AG						
AH						
AI						
AJ						
AK						
AL						
FOREIGN PATENT DOCUMENTS						
	Document No.	Date	Country	Class	Sub-class	Translation (Yes/No)
AM	PA 1999 00476	09 April 1999	Denmark			
AN						
AO						
AP						
AQ						
AR						
OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)						
AS	International Search Report for International Application No. PCT/DK 00/0170 dated 10 August 2000					
AT						
AU						
AV						
AW						
EXAMINER	DATE CONSIDERED					

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

PATENT

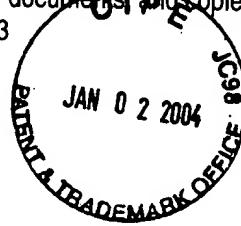
PROVISIONAL
 UTILITY

DESIGN
 PCT

Application No.: 09/546,573 Date: JANUARY 2, 2004
Client/Matter No.: 59866.000002 Client: RIGHOSPITALET
Inventor(s): MADS HOLTEN-ANDERSEN ET AL. Atty/Sec.: SA/abs
Filing Date: April 10, 2000
Title: TISSUE INHIBITOR OF MATRIX METALLOPROTEINASES TYPE-1 (TIMP-1) AS A CANCER MARKER

The following has been received in the U.S. Patent and Trademark Office on the date stamped hereon:

- Second Supplemental Information Disclosure Statement
- Form PTO/SB/08A (1 pages) identifying 7 documents and copies of documents
- International Search Report Dated 9/24/03



SEARCHED *
1/5/04

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:)
M. N. Holten-Andersen *et al.*)
Appln. No.: 09/546,573) Art Unit: 1642
Filed: April 10, 2000) Examiner: S. L. Rawlings, Ph.D.
)

For: TISSUE INHIBITOR OF MATRIX METALLOPROTEINASES TYPE-1
(TIMP-1) AS A CANCER MARKER

2nd SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In accordance with 37 C.F.R. §§ 1.97 and 1.98, and in compliance with the duty of disclosure set forth in 37 C.F.R. § 1.56, Applicants are submitting herewith copies of the documents listed on the attached Form PTO/SB/08A (modified) for consideration and to be made of record herein by the U.S. Patent and Trademark Office in the above-captioned application.

This 2nd Supplemental Information Disclosure Statement (IDS) is not to be construed as a representation that a search has, or has not, been conducted or that no better art exists. The filing of this 2nd Supplemental IDS is not to be construed as admission that the information cited in the IDS is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b).

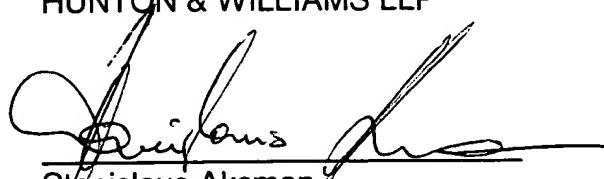
Accordingly, Applicants respectfully request that the Examiner consider the documents cited on the PTO/SB/08A and that the Examiner indicate that the documents have been considered in this application by returning a copy of the Form PTO/SB/08A with the Examiner's initials in the left column per MPEP 609.

This 2nd Supplemental Information Disclosure Statement is filed prior to issuance of the first Office Action in this RCE application. Accordingly, no fees are due. If any fees are incurred upon the filing of this 2nd Supplemental Information Disclosure Statement, including any petition fees, please charge the undersigned's Deposit Account No. 50-0206.

Respectfully submitted,

HUNTON & WILLIAMS LLP

By:


Stanislaus Aksman
Registration No. 28,562

Date: January 2, 2004

HUNTON & WILLIAMS LLP
1900 K Street, N.W.
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Washington, D.C. 20006-1109
Telephone: (202) 955-1500
Facsimile: (202) 778-2201

SA/abs

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Application Number	09/546,573
Filing Date	April 10, 2000
First Named Inventor	M. N. HOLTEN-ANDERSEN et al.,
Art Unit	1642
Examiner Name	S. L. Rawlings, Ph.D.

Sheet	1	of	1	Attorney Docket Number	59866.000002
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FOREIGN PATENT DOCUMENTS

*Examiner Initial	Cite No.	FOREIGN PATENT DOCUMENT		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	TRANSLATION	
		Country Code:	Number - Kind Code (if known)				YES	NO
1.	WO	00/62070		10-19-2000	Holten-Andersen et al.		<input checked="" type="checkbox"/>	<input type="checkbox"/>

NON-PATENT LITERATURE DOCUMENTS

*Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	TRANSLATION	
			YES	NO
2.		HOLTEN-ANDERSEN, MADS N. et al., "Plasma levels of Tissue Inhibitor of Metalloproteinases 1 measured during follow-up of colorectal cancer patients have clinical value in predicting patient outcome," Proceedings Of The American Association For Cancer Research Annual, Vol. 43, March 2002, page 715 (Abstract)	<input checked="" type="checkbox"/>	
3.		TAKADA, N. et al., "Postoperative sequential changes of serum levels of matrix metalloproteinase and tissue inhibitor of metalloproteinase in Japanese patients with the squamous cell carcinoma of esophagus," Proceedings Of The American Association For Cancer Research Annual, Vol. 40, March 1999, page 346 (Abstract)	<input checked="" type="checkbox"/>	
4.		ZUCKER, STANLEY et al., "Plasma assay of gelatinase B: Tissue inhibitor of metalloproteinase complexes in cancer," Cancer (Philadelphia), Vol. 76, No. 4, 1995, pages 700-708	<input checked="" type="checkbox"/>	
5.		HOLTEN-ANDERSEN, MADS N. et al., "Total levels of tissue inhibitor of metalloproteinases 1 in plasma yield high diagnostic sensitivity and specificity on patients with colon cancer," Clinical Cancer Research: An Official Journal Of The American Association For Cancer Research, Vol. 8, No. 1, January 2002, pp. 156-164	<input checked="" type="checkbox"/>	
6.		ZHOU, W. et al., "Identifying markers for pancreatic cancer by gene expression analysis," Database Medline [Online], Abstract of Cancer Epidemiology, Biomarkers & Prevention: A Publication Of The American Association For Cancer Research, Cosponsored by The American Society Of Preventive Oncology, 2/1998, Vol. 7, No. 2, 2 pages, (Abstract)	<input checked="" type="checkbox"/>	
7.		International Search Report for Application No. PCT/DK03/00230, mailed September 24, 2003	<input checked="" type="checkbox"/>	

EXAMINER SIGNATURE

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

UTILITY

DESIGN

Application Serial No.: 09/546,573

Client/Matter: 59866.000002

Inventor: M. N. Holten-Andersen et al.

Client: Righospitalet

Filing Date: April 10, 2000

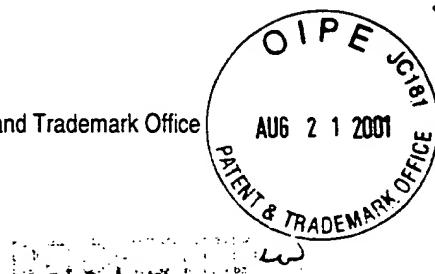
Date: August 21, 2001

Atty/Sec.: SA/sdw

Title: TISSUE INHIBITOR OF MATRIX METALLOPROTEINASES
TYPE-1 (TIMP-1) AS A CANCER MARKER

The following has been received in the U.S. Patent and Trademark Office
on the date stamped hereon:

1. Supplemental Information Disclosure Statement
2. Form PTO/SB/08A



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:)
)
)
M. N. Holten-Andersen et al.)
)
)
Serial No.: 09/546,573) Art Unit: 1642
)
)
Filed: April 10, 2000) Examiner: S. Rawlings
)

For: TISSUE INHIBITOR OF MATRIX METALLOPROTEINASES
TYPE-1 (TIMP-1) AS A CANCER MARKER

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

In accordance with 37 C.F.R. §§ 1.56, 1.97, and 1.98, Applicants respectfully request consideration of the references listed on the attached Form PTO/SB/08A.

Applicants submit this Supplemental Information Disclosure Statement (“Supplemental IDS”) pursuant to a recent telephone conversation with Mr. Rawlings, the Examiner responsible for the application. Mr. Rawlings acknowledged receipt of an IDS filed on June 26, 2001, but requested that Applicants file a Supplemental IDS listing on an appropriate form all the references identified in the International Search Report submitted with the June 26th IDS. Mr. Rawlings also confirmed that the references were received with the June 26th IDS, and no additional copies thereof were needed.

Applicants respectfully request that the Examiner consider the references cited on the Form PTO/SB/08A and that the Examiner indicate that the references have been considered

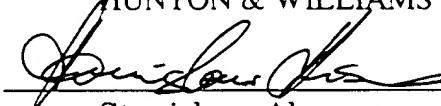
in this application by returning a copy of the Form PTO/SB/08A with the Examiner's initials in the left column per MPEP 609.

Applicants respectfully point out that the submission of the references is not an admission that they are prior art or that they are material to patentability of any claims of the application. Also, the submission of the June 26th IDS or Supplemental IDS is not an indication that a search has been made.

This Supplemental IDS is submitted prior to the issuance of a first Office Action on the merits; therefore, it is believed that no fees are required in connection therewith. If any fees are necessitated by the filing of this Information Disclosure Statement, please charge the undersigned's Deposit Account No. 50-0206.

Date: August 20, 2001

Respectfully submitted,
HUNTON & WILLIAMS


Stanislaus Aksman
Registration No. 28,562

1900 K Street, N.W., Suite 1200
Washington, D.C. 20006-1109
Ph. (202) 955-1500
Fax (202) 778-2201

Please type a plus sign (+) inside this box →

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet

1 of 1

Complete if Known

Application Number	09/546,573
Filing Date	04-10-2000
First Named Inventor	Mads Holten-Andersen et al.
Group Art Unit	1642
Examiner Name	S. Rawlings
Attorney Docket Number	59866.000002

U.S. PATENT DOCUMENTS						
Examiner Initials *	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
	U1	5,324,634		Zucker	06-28-1994	

FOREIGN PATENT DOCUMENTS							
Examiner Initials *	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Office ³	Number ⁴	Kind Code ⁵ (if known)			
	F1		9738314	WO	Miller et al.	10-16-1997	T ₆

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS						
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.				
	P1	National Library of Medicine, PubMed Website, "Serum levels of a tissue inhibitor of metalloproteinases-1 (TIMP-1) in bladder cancer patients". Naruo S et al., Int J Urol, Vol. 1, No. 3 September 1994, pp. 238-231. see abstract				
	P2	National Library of Medicine, PubMed Website, "Tissue inhibitors of metalloproteinases (TIMP) in invasion and proliferation", Henniet P. et al., APMIS, Vol. 109, No. 1, January 1999, pp. 111-119. see abstract				
	P3	Patent Abstracts of Japan, JP8136548 A, Morinaga, 05-31-1996				
	P4	Dialog Information Services, File 159, Cancerlit, accession no. 93691448, Guillem JG et al., " Evaluation of tissue inhibitor of metalloproteinase-1 (TIMP-1) as a prognostic marker of human colorectal cancer invation", Proc Annu Meet Am Assoc Cancer Res: 34:A466 1993				
	P5	Dialog Information Services, File 159, Cancerlit, accession no. 96647008, " Elevated tissue inhibitor of metalloproteinase 1 RNA in colorectal cancer stroma correlates with lymph node and distant metastases" Clin Cancer Res; 1(8): 899-906 1995 Zeng Z et al.				

Examiner Signature	Date Considered
--------------------	-----------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

BEST AVAILABLE COPY

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:)
M. N. Holten-Andersen et al.)
Serial No.: 09/546,573) Art Unit: 1642
Filed: April 10, 2000) Examiner: S. L. Rawlings, Ph.D,
)

For: TISSUE INHIBITOR OF MATRIX METALLOPROTEINASES
TYPE-1 (TIMP-1) AS A CANCER MARKER

INFORMATION DISCLOSURE STATEMENT

MAIL STOP DD
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In accordance with 37 C.F.R. §§ 1.56, 1.97, and 1.98, Applicant respectfully requests consideration of the references listed on the attached Form PTO/SB/08A (modified). Copies of the references listed are also enclosed.

This Information Disclosure Statement (IDS) is not to be construed as a representation that a search has, or has not, been conducted or that no better art exists. The filing of this IDS is not to be construed as admission that the information cited in the IDS is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b).

Accordingly, Applicant respectfully requests that the Examiner consider the references cited on the PTO/SB/08A and that the Examiner indicate that the references have been considered in this application by returning a copy of the Form PTO/SB/08A with the Examiner's initials in the left column per MPEP 609.

BEST AVAILABLE COPY

ATTORNEY DOCKET No. 59866.000002
APPLICATION No. 09/546,573

This Information Disclosure Statement is being submitted after the mailing of a final Office Action. Pursuant to 37 C.F.R. § 1.97(d)(2), a check in the amount of \$180.00 as set forth in § 1.17(p) is enclosed. In the event any variance exists between the amount enclosed and the Patent Office charges, please charge or credit any difference to the undersigned's Deposit Account No. 50-0206.

Respectfully submitted,

HUNTON & WILLIAMS LLP



Dated: July 10, 2003

By:

Stanislaus Aksman
Stanislaus Aksman
Registration No. 28,562

HUNTON & WILLIAMS LLP
1900 K Street, N.W.
Suite 1200
Washington, D.C. 20006-1109
Telephone: (202) 955-1500
Facsimile: (202) 778-2201

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PTO/SB/08A (10/01) (modified)

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449A/PTO

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

(use as many sheets as necessary)

Application Number	09/546,573
Filing Date	April 10, 2000
First Named Inventor	Mads N. Holten-Andersen
Art Unit	1642
Examiner Name	S. Rawlings

Sheet 1 of 1 Attorney Docket Number 59866.000002

NON-PATENT LITERATURE DOCUMENTS

*Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	TRANSLATION	
			YES	NO
	1.	Mads N. Holten-Andersen et al., "Measurement of the Noncomplexed Free Fraction of Tissue Inhibitor of Metalloproteinases 1 in Plasma by Immunoassay", <i>Clinical Chemistry</i> 48:8, 1305-1313 (2002)		
	2.	Mads N. Holten-Andersen et al., "Total Levels of Tissue Inhibitor of Metalloproteinases 1 in Plasma Yield High Diagnostic Sensitivity and Specificity in Patients with Colon Cancer", <i>Clinical Cancer Research</i> , Vol. 8, 156-164, January 2002		

EXAMINER SIGNATURE

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

BEST AVAILABLE COPY

PATENT

PROVISIONAL
 UTILITY

DESIGN
 PCT

Application No.: 09/546,573 Date: July 30, 2003
Client/Matter No.: 59866.000002 Client: RIGHOSPITALET
Inventor(s): M. N. Holten-Andersen et al. Atty/Sec.: SA/jt
Title: TISSUE INHIBITOR OF MATRIX METALLOPROTEINASES TYPE-1 (TIMP-1)
AS A CANCER MARKER

The following has been received in the U.S. Patent and Trademark
Office on the date stamped hereon:

- RCE Transmittal Form
- Supplemental Information Disclosure Statement
- Form PTO/SB/08A with Copies of 12 References
- Check No. 2057148 in the Amount of \$375.00



DOCKETED

7-31-03 JY

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:)
M. N. Holten-Andersen et al.)
Appl. No.: 09/546,573) Art Unit: 1642
Filed: April 10, 2000) Examiner: S. L. Rawlings, Ph.D.
)

For: TISSUE INHIBITOR OF MATRIX METALLOPROTEINASES
TYPE-1 (TIMP-1) AS A CANCER MARKER

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In accordance with 37 C.F.R. §§ 1.56, 1.97, and 1.98, Applicant respectfully requests consideration of the references listed on the attached Form PTO/SB/08A (modified). Copies of the references listed are also enclosed.

This Information Disclosure Statement (IDS) is not to be construed as a representation that a search has, or has not, been conducted or that no better art exists. The filing of this IDS is not to be construed as admission that the information cited in the IDS is, or is considered to be, material to patentability as defined in 37 C.F.R. § 1.56(b).

Accordingly, Applicant respectfully requests that the Examiner consider the references cited on the PTO/SB/08A and that the Examiner indicate that the references have been considered in this application by returning a copy of the Form PTO/SB/08A with the Examiner's initials in the left column per MPEP 609.

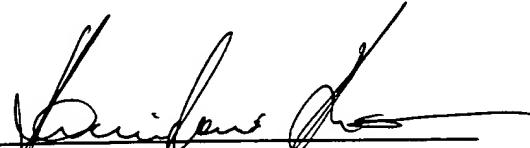
It is respectfully submitted that no fee is required for consideration of this information. However, in the event any fee is deemed necessary, the Commissioner is authorized to charge the undersigned's Deposit Account No. 50-0206.

Respectfully submitted,

HUNTON & WILLIAMS LLP

Date: July 30, 2003

By:


Stanislaus Aksman
Registration No. 28,562

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Substitute for form 1449A/PTO

Application Number 09/546,573

Filing Date April 10, 2000

First Named Inventor Mads N. Holten-Andersen

Art Unit 1642

Examiner Name S. Rawlings

Sheet 1

of 1

Attorney Docket Number 59866.000002

NON-PATENT LITERATURE DOCUMENTS

*Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	TRANSLATION	
			YES	NO
	1.	Mads N. Holten-Andersen et al., "Measurement of the Noncomplexed Free Fraction of Tissue Inhibitor of Metalloproteinases I in Plasma by Immunoassay", <i>Clinical Chemistry</i> 48:8, 1305-1313 (2002)		
	2.	Mads N. Holten-Andersen et al., "Total Levels of Tissue Inhibitor of Metalloproteinases 1 in Plasma Yield High Diagnostic Sensitivity and Specificity in Patients with Colon Cancer", <i>Clinical Cancer Research</i> , Vol. 8, 156-164, January 2002		
	3.	Standard Search Report, in connection with application No. 32127 DK 01, 8 April 2002, Denmark (9 references)		
	4.	Zhou, et al., "Identifying Markers for Pancreatic Cancer by Gene Expression Analysis," <i>Cancer Epidemiology, Biomarkers & Prevention</i> , (1998), 7(2), 109-112.		
	5.	Wood, et al., "In Situ Hybridization Studies Of Metalloproteinases 2 And 9 And TIMP-1 And TIMP-2 Expression In Human Prostate Cancer," <i>Clinical & Experimental Metastasis</i> (1997), 15(3), 246-258.		
	6.	Jung, et al., "Quantification Of Matrix Metalloproteinases And Tissue Inhibitors Of Metalloproteinase In Prostatic Tissue: Analytical Aspects", <i>Prostate</i> , (1998), 34(2), 130-136, New York.		
	7.	Naruo, et al., "Serum Levels of a Tissue Inhibitor of Metalloproteinases-1 (TIMP-1) in Bladder Cancer Patients", <i>International Journal of Urology</i> , Churchill Livingstone, Tokyo, JP, vol. 1, no. 3, September 1994.		
	8.	Zucker, et al., "Plasma Assay of Gelatinase B: Tissue Inhibitor of Metalloproteinase Complexes in Cancer," <i>Cancer</i> , American Cancer Society, Philadelphia, PA, vol. 76, no. 9, August 15, 1995.		
	9.	Henriet, et al., "Tissue Inhibitors of Metalloproteinases (TIMP) in Invasion and Proliferation", <i>APMIS</i> , Copenhagen, DK, vol. 107, no. 1, 1999.		

FOREIGN PATENT DOCUMENTS

*Examiner Initials	Cite No.	FOREIGN PATENT DOCUMENT		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	TRANSLATION	
		Country Code:	Number - Kind Code (if known)				YES	NO
	10.	WO	00/62070 A	10-19-2000	Holten-Andersen et al.		<input type="checkbox"/>	<input type="checkbox"/>
	11.	WO	00/20860 A	04-13-2000	Calbiochem Novabiochem Corp.		<input type="checkbox"/>	<input type="checkbox"/>
	12.	WO	93/20447 A	10-14-1993	The Research Foundation of State University of New York		<input type="checkbox"/>	<input type="checkbox"/>

EXAMINER SIGNATURE

DATE CONSIDERED

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

TO THE U.S. PATENT AND TRADEMARK OFFICE

Please stamp the date of receipt of the following document(s) and return this card to us:

INVENTOR(S):	HOLLEN-ANDE N. Mads et al.
RE:	TISSUE INHIBITOR OF MATRIX METALLOPROTEINASES TYPE-1 (TIMP-1) AS A CANCER MARKER
TITLE OF DOCUMENT(S):	PTO/SB/21 Transmittal Form; Information Disclosure Statement, Form PTO-1449, photocopy of 35 references cited and Certificate of First Class Mailing.
Application No.	09/546,573
File No.	019829000310
Date Due	
Date Mailed	March 27, 2001
Attorney/Secretary	Kevin Bastian/Jill Clarke

BEST AVAILABLE COPY

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to:

Assistant Commissioner for Patents
Washington, D.C. 20231

PATENT
Attorney Docket No.: 18484-002130US

On March 27, 2001

TOWNSEND and TOWNSEND and CREW LLP

By: Jill R. Clarke
Jill R. Clarke

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

HOLTEN-ANDERSEN, Mads

Application No.: 09/546,573

Filed: April 10, 2000

For: TISSUE INHIBITOR OF MATRIX METALLOPROTEINASES TYPE-1 (TIMP-1) AS A CANCER MARKER

Examiner: Unassigned

Art Unit: 1643

INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR §1.97 and §1.98

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

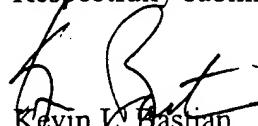
The references cited on attached form PTO-1449 are being called to the attention of the Examiner. Copies of the references are enclosed. It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and

no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

Applicants believe that no fee is required for submission of this statement, since it is being submitted prior to the first Office Action. However, if a fee is required, the Commissioner is authorized to deduct such fee from the undersigned's Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,



Kevin L. Bastian
Reg. No. 34,774

TOWNSEND and TOWNSEND and CREW LLP
Two Embarcadero Center, 8th Floor
San Francisco, California 94111-3834
Tel: 415-576-0200
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KLB/jrc

SF 1205238 v1

FORM PTO-1449 (Modified) LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)		Attorney Docket No.: 019829000310	Application No.: 09/546,573			
		Applicant: HOLLEN-ANDERSEN, Mads				
		Filing Date: April 10, 2000	Group: 1643			
Reference Designation		U.S. PATENT DOCUMENTS			Page 1	
Examiner Initial	Document No.	Date	Name	Class	Sub-class	Filing Date (If Appropriate)
AA	5,324,634	06/28/94	Zucker	435	7.23	.
FOREIGN PATENT DOCUMENTS						
	Document No.	Date	Country	Class	Sub-class	Translation (Yes/No)
AB						
OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)						
AC	Baker et al., "Serum Metalloproteinases and their Inhibitors: Markers for Malignant Potential," <i>Br. J. Cancer</i> 70:506-512 (1994)					
AD	Birkedal-Hansen et al., "Matrix Metalloproteinases: A Review," <i>Critical Reviews in Oral Biology and Medicine</i> 4:197-250 (1993)					
AE	Clark et al., "Polyclonal and Monoclonal Antibodies Against Human Tissue Inhibitor of Metalloproteinases (TIMP) and the Design of an Enzyme-Linked Immunosorbent Assay to Measure TIMP," <i>Matrix</i> 11:76-85 (1991)					
AF	Cooksley et al., "Immunoassays for the Detection of Human Collagenase, Stromelysin, Tissue Inhibitor of Metalloproteinases (TIMP) and Enzyme-Inhibitor Complexes," <i>Matrix</i> 10:285-291 (1990)					
AG	Cooper et al., "Platelet-derived Collagenase Inhibitor: Characterization and Subcellular Localization," <i>Proc. Natl. Acad. Sci. USA</i> 82:2779-2783 (1985)					
AH	DeClerck et al., "Inhibition of Invasion and Metastasis in Cells Transfected with an Inhibitor of Metalloproteinases," <i>Cancer Research</i> 52:701-708 (1992)					
AI	Fujimoto et al., "A One-step Sandwich Enzyme Immunoassay for Tissue Inhibitor of Metalloproteinases-2 Using Monoclonal Antibodies," <i>Clinica Chimica Acta</i> 220:31-45 (1993)					
AJ	Goldberg et al., "Interaction of 92-kDa Type IV Collagenase with the Tissue Inhibitor of Metalloproteinases Prevents Dimerization, Complex Formation with Interstitial Collagenase, and Activation of the Proenzyme with Stromelysin," <i>The Journal of Biological Chemistry</i> 267:4583-4591 (1992)					
AK	Hembry et al., "Immunolocalization of Tissue Inhibitor of Metalloproteinases (TIMP) in Human Cells Characterization and Use of a Specific Antiserum," <i>J. Cell. Sci.</i> 73:105-119 (1985)					
AL	Holten-Andersen et al., "Quantitation of TIMP-1 in Plasma of Healthy Blood Donors and Patients with Advanced Cancer," <i>British Journal of Cancer</i> 80:495-503 (1999)					
AM	Jung et al., "Matrix Metalloproteinases 1 and 3, Tissue Inhibitor of Metalloproteinase-1 and the Complex of Metalloproteinases-1/Tissue Inhibitor in Plasma of Patients with Prostate Cancer," <i>Int. J. Cancer (Pred. Oncol.)</i> 74:220-223 (1997)					
AN	Jung et al., "What kind of Specimen Should be Selected for Determining Tissue Inhibitor of Metalloproteinases-1 (TIMP-1) in Blood?" <i>Clinica Chimica Acta</i> 254:97-100 (1996)					
AO	Jung et al., "Role of Specimen Collection in Preanalytical Variation of Metalloproteinases and Their Inhibitors in Blood," <i>Clinical Chemistry</i> 42:2043-2045 (1996)					
AP	Keyszer et al., "Circulating Levels of Matrix Metalloproteinases MMP-3 and MMP-1, Tissue Inhibitor of Metalloproteinases 1 (TIMP-1), and MMP-1/TIMP-1 Complex in Rheumatic Disease. Correlation with Clinical Activity of Rheumatoid Arthritis versus Other Surrogate Markers," <i>The Journal of Rheumatology</i> 26:251-258 (1999)					
AQ	Kjeldsen et al., "Subcellular Localization and Release of Human Neutrophil Gelatinase, Confirming the Existence of Separate Gelatinase-containing Granules," <i>Biochem. J.</i> 287:603-610 (1992)					
AR	Khokha and Waterhouse, "The role of tissue inhibitor of metalloproteinase-1 in specific aspects of cancer progression and reproduction," <i>Journal of Neuro-Oncology</i> 18:123-127 (1994)					

FORM PTO-1449 (Modified) LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)		Attorney Docket No.: 019829000310	Application No.: 09/546,573
		Applicant: HOLLEN-ANDERSEN, Mads	
		Filing Date: April 10, 2000	Group: 1643
<input type="checkbox"/> AS	Khokha et al., "Suppression of Invasion by Inducible Expression of Tissue Inhibitor of Metalloproteinase-1 (TIMP-1) in B16-F10 Melanoma Cells," <i>Journal of the National Cancer Institute</i> 84:1017-1021 (1992)		
<input type="checkbox"/> AT	Khokha et al., "Up-regulation of TIMP-1 Expression in B16-F10 Melanoma Cells Suppresses their Metastatic Ability in Chick Embryo," <i>Clin. Exp. Metastasis</i> 10:365-370 (1992)		
<input type="checkbox"/> AU	Kleiner et al., "Stability Analysis of Latent and Active 72-kDA Type IV Collagenase: The Role of Tissue Inhibitor of Metalloproteinases-2 (TIMP-2)," <i>Biochemistry</i> 32:1583-1592 (1993)		
<input type="checkbox"/> AV	Kodama et al., "A Sandwich Enzyme Immunoassay for Collagenase Inhibitor Using Monoclonal Antibodies," <i>Matrix</i> 9:1-6 (1989)		
<input type="checkbox"/> AW	Liotta et al., "Cancer Metastasis and Angiogenesis: An Imbalance of Positive and Negative Regulation," <i>Cell</i> 64:327-336 (1991)		
<input type="checkbox"/> AX	MacDougall and Matrisian, "Contributions of Tumor and Stromal Matrix Metalloproteinases to Tumor Progression, Invasion and Metastasis," <i>Cancer and Metastasis Reviews</i> 14:351-362 (1995)		
<input type="checkbox"/> AY	Matrisian, "The Matrix-Degrading Metalloproteinases," <i>BioEssays</i> 14:455-463 (1992)		
<input type="checkbox"/> AZ	Mimori, "Clinical Significance of Tissue Inhibitor of Metalloproteinase Expression in Gastric Carcinoma," <i>British Journal of Cancer</i> 76:531-536 (1997)		
<input type="checkbox"/> BA	Moll et al., "Tumor Promoter-stimulated M, 92,000 Gelatinase Secreted by Normal and Malignant Human Cells: Isolation and Characterization of the Enzyme from HT1080 Tumor Cells," <i>Cancer Research</i> 50:6162-6170 (1990)		
<input type="checkbox"/> BB	Moutsakakis et al., "Characterization of Metalloproteinases and Tissue Inhibitors of Metalloproteinases in Human Plasma," <i>Connective Tissue Research</i> 28:213-230 (1992)		
<input type="checkbox"/> BC	Murphy et al., "The N-Terminal Domain of Tissue Inhibitor of Metalloproteinases Retains Metalloproteinase Inhibitor Activity," <i>Biochemistry</i> 30:8097-8102 (1991)		
<input type="checkbox"/> BD	Stetler-Stevenson et al., "Matrix metalloproteinases and Tumor Invasion: from Correlation and Causality to the Clinic," <i>Seminars in Cancer Biology</i> 7:147-154 (1996)		
<input type="checkbox"/> BE	Stetler-Stevenson et al., "Tissue Inhibitor of Metalloproteinases (TIMP-2) A New Member of the Metalloproteinase Inhibitor Family," <i>The Journal of Biological Chemistry</i> 264:17374-17378 (1989)		
<input type="checkbox"/> BF	Stetler-Stevenson et al., "Extracellular matrix 6: Role of matrix metalloproteinases in tumor invasion and metastasis," <i>The FASEB Journal</i> 7:1434-1441 (1993)		
<input type="checkbox"/> BG	Thorgeirsson et al., "Tumor invasion, proteolysis, and angiogenesis," <i>Journal of Neuro-Oncology</i> 18:89-103 (1994)		
<input type="checkbox"/> BH	Welgus et al., "Human Skin Fibroblast Collagenase: Interaction with Substrate and Inhibitor," <i>Collagen Rel. Res.</i> 5:167-179 (1985)		
<input type="checkbox"/> BI	Wilhelm et al., "SV40-transformed Human Lung Fibroblasts Secrete a 92-kDA Type IV Collagenase Which Is Identical to That Secreted by Normal Human Macrophages," <i>The Journal of Biological Chemistry</i> 264:17213-17221 (1989)		
<input type="checkbox"/> BJ	Zucker et al., "Plasma Assay of Gelatinase B: Tissue Inhibitor of Metalloproteinase Complexes in Cancer," <i>Cancer</i> 76:700-708 (1995)		
EXAMINER		DATE CONSIDERED	

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.